

TRANSPORTATION ENGINEERS+PLANNERS



Staff

24 Employees
11 Licensed Professional Engineers (PE)
9 Professional Traffic Operations Engineers (PTOE)
2 Professional Transportation Planners (PTP)
1 Road Safety Professional (RSP)

Services

Access Management
ADA Compliance
Bicycle/Pedestrian Plans & Facilities
Community & Stakeholder Engagement
Complete Streets
Construction Detour Mitigation
Construction Review & Inspection
Data Collection
Expert Witness Services
Freeway & Arterial Operations
Funding & Grant Applications
Geographic Information Systems (GIS)
Micro-Simulation Modeling
Parking Studies
Roadway & Intersection Design
Roundabout Studies & Design
Safety Studies & Analysis
Signal Optimization & Synchronization
Smart Cities Planning
Sustainable Transportation Solutions
Traffic Calming
Traffic Impact Studies
Traffic Signal Turn-Ons & Programming
Traffic Signal, Lighting & ITS Design
Training & Professional Development
Transportation Planning

Clients

Private Businesses
Developers
Land Owners
Government Agencies
Not-for-Profit Organizations
Public Institutions
Engineering Firms
Architects

Contact

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COMPANY OVERVIEW

MISSION STATEMENT

CBB is a Midwest firm where free-thinking, innovation, and collaboration merge with international best practices to provide traffic engineering and transportation planning solutions for safer, more sustainable, and economically vibrant communities.

ABOUT CBB

Established in 1973, CBB is a leader in transportation engineering and planning. Several of our staff members have advanced professional accomplishments including post-graduate degrees in transportation engineering and planning; licensure as Professional Engineers (PE); and certifications as Professional Traffic Operations Engineers (PTOE), Professional Transportation Planners (PTP), and Road Safety Professionals (RSP). Our active engagement in technical societies such as the Institute of Transportation Engineers (ITE), American Public Works Association (APWA), International Municipal Signals Association (IMSA), American Planning Association (APA), National Association of City Transportation Officials (NACTO) and Transportation Research Board (TRB) keep us abreast of new trends, advancements, and technologies.

ENGINEERING STUDIES AND PLANNING

CBB blends transportation engineering and planning to develop visionary, practical solutions that meet the needs of our clients. Through the use of the latest analytical tools, we work to promote safe and efficient access, mobility, and circulation. CBB regularly conducts engineering and planning studies in areas such as access management, safety studies, traffic impact studies, comprehensive transportation plans, public engagement, and the writing of grant applications.

DESIGN SERVICES

The CBB team provides design services for public and private clients for projects ranging in size from interchanges to turn lanes and driveways. Each project is a unique assignment and we strive to develop alternatives that minimize impacts and construction costs. CBB has a wide-range of design experience including highways, complex intersections and interchanges, roundabouts, traffic calming, sidewalks, trails, ADA compliance, traffic signals, intelligent transportation services (ITS), and lighting.

ARTERIAL OPERATIONS

CBB specializes in the analysis, optimization and synchronization of signalized intersections along corridors and within urban networks. Our signature approach incorporates core traffic engineering practices combined with extensive in-field implementation strategies. CBB also specializes in real-time management of traffic for construction and other projects, including signal turn-on assistance and detour mitigation.

FREEWAY OPERATIONS

CBB's extensive freeway operations experience provides us with a deep understanding of the issues and challenges related to complex urban freeways. We use advanced traffic simulation modeling techniques to thoroughly test alternatives. We understand advanced operational strategies and how to apply them to on-the-ground systems. Our team regularly performs Access Justification Reports, bottleneck removal plans, corridor evaluations, and interchange studies.

SUSTAINABLE TRANSPORTATION

CBB believes that multimodal transportation solutions and balanced transportation systems are vital to connecting communities. Our team has experience with bicycle and pedestrian planning, Great Streets, Complete Streets, Safe Routes to Schools, trail planning, and walkability audits. CBB also understands that new technologies can often enhance the efficiency and effectiveness of transportation infrastructure through "Smart City" concepts. CBB's practical approach to sustainable transportation solutions helps to ensure that our recommendations are implementable in the communities that we serve.

DATA COLLECTION

CBB understands the importance of starting projects with accurate data, since the data is the foundation for transportation decision making. Our staff performs traffic counts, parking inventories, speed studies, gap and delay studies, origin and destination studies, sidewalk inventories and sign inventories. Our dedicated technical staff allows us to provide our clients with quality transportation data at a minimal cost. Our inventory of data collection equipment allows us to respond quickly to project needs.



WORK WITH GOVERNMENT AGENCIES, LAST 2 YEARS

STATE GOVERNMENT

Illinois Department of Transportation (IDOT)
Missouri Department of Transportation (MoDOT)

CITY GOVERNMENT

Arnold, MO	O'Fallon, IL
Ballwin, MO	O'Fallon, MO
Brentwood, MO	Overland, MO
Columbia, MO	Smithton, IL
Clayton, MO	Springfield, MO
Dardenne Prairie, MO	St. Charles, MO
Ellisville, MO	St. James, MO
Farmington, MO	St. Louis, MO
Frontenac, MO	St. Peters, MO
Lake St. Louis, MO	University City, MO
Manchester, MO	Union, MO
Maryland Heights, MO	Wentzville, MO

COUNTY GOVERNMENT

Boone County, MO
Jefferson County, MO
St. Charles County, MO
St. Louis County, MO

METROPOLITAN PLANNING ORGANIZATIONS

East-West Gateway Council of
Governments

SERVICES PROVIDED

Access Management
ADA Compliance
Bicycle/Pedestrian Plans & Facilities
Community & Stakeholder Engagement
Complete Streets
Construction Detour Mitigation
Construction Review & Inspection
Data Collection
Expert Witness Services
Freeway & Arterial Operations
Funding & Grant Applications
Geographic Information Systems (GIS)
Great Streets
Micro-simulation Modeling

Parking Studies
Roadway & Intersection Design
Roundabout Studies & Design
Safety Studies & Analysis
Signal Optimization & Synchronization
"Smart City" Planning
Sustainable Transportation Solutions
Traffic Calming
Traffic Impact Studies
Traffic Signal, Lighting & ITS Design
Traffic Signal Turn-Ons & Programming
Training & Professional Development
Transportation Planning
Travel Forecasting & Modeling



REPRESENTATIVE LPA PROJECT EXPERIENCE

Traffic Management Enhancements Phase 3

City of St. Louis, MO

CBB recently completed this Congestion Mitigation Air Quality Improvement (CMAQ) program project for the City of St. Louis. The phase 3 work is a continuation of previous work done within the City of St. Louis. The on-going project includes three major components including (1) Downtown Multimodal Study & Signal Timing, (2) Fiber optic network enhancements and (3) Traffic Information Center Operations. The Downtown Multimodal Study developed a robust multimodal system that enhances connections for pedestrians, bicyclists, transit users and motorists, of all ages and abilities, while improving quality of life, supporting economic growth and community development, easing congestion and improving air quality, and enhancing public health. The plan was completed in June 2018 and adopted by the City's Planning Commission in December 2018. It provides a framework for the development of future transportation projects in the City of St. Louis. The plan has developed a hierarchy of streets by mode: walking, biking, transit & vehicular access. The team has developed recommendations for implementation on these corridors to enhance the travelling experience, improve safety, allow mode choice, promote economic growth, and foster a more vibrant Downtown St. Louis. In addition to studying the Downtown network and making recommendations for enhanced transportation choices, CBB is working to design system updates to the downtown network, including ITS devices, cameras, and a more connected fiber network. Strategically placed throughout Downtown, these cameras will assist with enhanced traffic operations. CBB is also providing traffic information center staffing.

Gateway Green Light

St. Charles, MO

(GGL) since the first phase of the program. The work is a collaboration between St. Charles County, MoDOT, and the Cities of St. Peters, O'Fallon, Wentzville, Lake St. Louis, Dardenne Prairie, Weldon Spring, and St. Charles with the goal to provide a means to safely and effectively manage regional transportation demands—regardless of jurisdictional boundaries. The inaugural phase of the project included the design and procurement of a County-Wide Advanced Traffic Management System (ATMS), 320 Traffic Signal Controllers, Communication Upgrade - including Cellular Modems and Fiber Optic Cable, 25 Traffic Surveillance Cameras, and 40 Travel Time Detectors. Ten corridors, including 160 traffic signals, were then identified as the highest priority in the region for the purposes of signal timing optimization. This process involved analyzing traffic volume data at each of the intersections (including collecting new counts when needed) as well as field measuring base travel time conditions (field measured) on each corridor. This first round of optimized timings was implemented in 2014. CBB is currently leading a consultant team that provides ongoing support services including a daily operator, who maintains existing timing plans, monitors the health of the signal system, and monitors for incidents. During incidents, the operator utilizes MoDOT's Arterial Management Interface to temporarily revise timing parameters when applicable.

Kiener Plaza Roadway Improvements

City of St. Louis, MO

CBB was involved with the recent \$19 million Kiener Plaza renovations. The redesign of Kiener Plaza comes in conjunction with the \$380 million Gateway Arch Grounds renovation, coordinated by Gateway Arch Park Foundation. The updated Kiener Plaza includes wide shaded sidewalks, a large central lawn, interactive fountains including a new fountain for the Runner statue; bicycle parking; a woodland garden; and café seating. In addition to a comfortable park environment, it is imperative transportation moves efficiently and safely around the area. CBB was responsible for designing the transportation enhancements around the park, including upgrades for pedestrians, bicycles and motorists, totaling \$1.25 million in CMAQ funded construction costs. CBB designed traffic signal improvements as part of a CMAQ program at five signals surrounding the park including new signal controllers, ADA upgrades – curb ramps and sidewalks, and updated signal infrastructure to replace the outdated system. The signal arms along Chestnut and a portion of Broadway were designed with the ability to swivel away from the road to accommodate parades and other special events. As a part of the sidewalk improvements, CBB designed curb 'bulb outs', where appropriate to enhance pedestrian visibility and shorten crossing distance. CBB's plans include updated medians and midblock crossings, in addition to new bicycle facilities – a parking-protected bicycle lane on Chestnut and the City's first bike signal at 6th and Chestnut, as well as wireless sensor detection for bicycles. Several roadways were milled and resurfaced including Market Street, which included back-in, angled parking adjacent to the plaza.

